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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,866	08/26/2002	Richard Lee-Chee Kuo	ASTP0030USA	4612

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NORTH AMERICA INTERNATIONAL PATENT OFFICE (NAIPC)
P.O. BOX 506
MERRIFIELD, VA 22116

EXAMINER

SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,866

Applicant(s)

KUO, RICHARD LEE-CHEE

Examiner

Philip J. Sobutka

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Regarding claim 1 there appears to be a word processing error which has inserted extraneous text into the claim, specifically beginning with the number series in line 5, through to the period on line 7, and beginning with the number series in line 10 through to the period in line 12.
4. Regarding claim 3 there appears to be a word processing error which has inserted extraneous text into the claim, specifically beginning with the number series in line 6, through to the period on line 8, and beginning with the number series in line 9 through to the period in line 11.
5. Note that in order to examine the claims the examiner has assumed that the first section of text beginning with number series through to the period should be removed from the claim, and the second section should be replaced with the identifier for UTRAN; universal terrestrial radio access network.

Allowable Subject Matter

6. Claims 1 and 3 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Art Unit: 2684

7. Claims 2,4-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Consider claim 1. The nearest prior art as shown in Virtanen or Fauconnier fails to teach a method comprising: a mobile unit maintaining a status variable capable of assuming a NOT STARTED state indicating that ciphering is not to be performed along the new radio bearer and a STARTED state that indicates that ciphering is to be performed, the method comprising the steps of: a UTRAN sending a control command to the mobile unit to establish a new radio bearer; in response, the mobile unit generating a first value based on the first hyper frame numbers (HFNs) of the established radio bearers, the first value being at least as great as the X most significant bits (MSB) of each first HFN; and setting the MSB of the initial HFN of the new radio bearer equal to the first value while the status variable is set to the NOT STARTED state.

Consider claim 3. The nearest prior art as shown in Virtanen or Fauconnier fails to teach a method comprising: a mobile unit maintaining a status variable capable of assuming a NOT STARTED state indicating that ciphering is not to be performed along the new radio bearer and a STARTED state that indicates that ciphering is to be performed, the method comprising the steps of: a UTRAN sending a control command to the mobile unit to establish a new radio bearer; in response, the mobile unit generating a first value based on a reference value, the first value being at least as great as the x most significant bits of an initial hyper frame number (HFN) of the new

Art Unit: 2684

radio bearer; and setting the MSB of the initial HFN of the new radio bearer equal to the first value while the status variable is set to the NOT STARTED state.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Virtanen teaches the typical prior art system in which ciphering, or encryption keys are set and used for the establishment of a radio channel.

Fauconnier et al (US 2002/0013147) teaches setting ciphering keys in radio channels.

Kuo et al (US 6,728,529) has been cited to show a related application by the applicant.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Sobutka whose telephone number is 703-305-4825, after March 2005 the number will change to (571) 272-7887. The examiner can normally be reached on Monday-Friday 8:30-5:00.

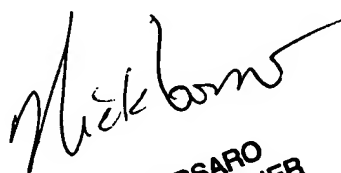
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Art Unit: 2684

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip Sobutka
(703) 305-4825

March 5, 2005


NICK CORSARO
PRIMARY EXAMINER